

Work Order ID 70525

Friday, June 10, 2011 11:42:13 AM



Page 1

Item ID:	D3443-043	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Strut Weldment Assembly					
Start Date:	6/10/2011	Start Qty:	2.00	Cust Item ID:		
Required Date:	6/15/2011	Req'd Qty:	2.00	Customer:		
Reference:						

Approvals:	Process Plan:		Date:	11-06-10	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3443	Rev C								
100		0.00							
	Large Fab								
Large Fab	Memo	0.00							
Large Fab	Weld assembly as per dwg D3443								
110	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
QC	Memo	0.00							
Quality Control									
120	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

EL 11-8-25

QC 11-8-30

8-16-31

44

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

[illegible]

Friday, June 10, 2011 11:42:13 AM

[illegible]

<p>1. The first step in the process of developing a new product is to identify a market need. This involves conducting market research to determine what consumers want and need. Once a need is identified, the next step is to develop a concept that addresses this need.</p> <p>2. The second step is to develop a business plan. This involves determining the costs of production, the pricing strategy, and the marketing plan. The business plan also includes a financial forecast and a break-even analysis.</p> <p>3. The third step is to secure financing. This can be done through a variety of sources, including banks, venture capitalists, and angel investors. Once financing is secured, the next step is to develop a prototype of the product.</p> <p>4. The fourth step is to conduct a pilot test. This involves producing a small quantity of the product and testing it in a limited market. This allows the entrepreneur to gather feedback from consumers and make any necessary adjustments to the product or the business plan.</p> <p>5. The fifth and final step is to launch the product. This involves producing a larger quantity of the product and marketing it to the target market. The entrepreneur must monitor sales and customer feedback closely to ensure the product is successful in the market.</p>	<p>1. The first step in the process of developing a new product is to identify a market need. This involves conducting market research to determine what consumers want and need. Once a need is identified, the next step is to develop a concept that addresses this need.</p> <p>2. The second step is to develop a business plan. This involves determining the costs of production, the pricing strategy, and the marketing plan. The business plan also includes a financial forecast and a break-even analysis.</p> <p>3. The third step is to secure financing. This can be done through a variety of sources, including banks, venture capitalists, and angel investors. Once financing is secured, the next step is to develop a prototype of the product.</p> <p>4. The fourth step is to conduct a pilot test. This involves producing a small quantity of the product and testing it in a limited market. This allows the entrepreneur to gather feedback from consumers and make any necessary adjustments to the product or the business plan.</p> <p>5. The fifth and final step is to launch the product. This involves producing a larger quantity of the product and marketing it to the target market. The entrepreneur must monitor sales and customer feedback closely to ensure the product is successful in the market.</p>
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Required Date: 6/15/2011 Req'd Qty: 2.00

[illegible]

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

2. The second step is to gather relevant information and data. This can involve research, consultation with experts, or collecting data from various sources.

3. The third step is to analyze the information and data. This involves identifying patterns, trends, and relationships that can help to answer the question or solve the problem.

4. The fourth step is to develop a solution or answer. This involves applying the information and data to the problem and developing a plan or strategy to address it.

5. The fifth step is to implement the solution or answer. This involves putting the plan or strategy into action and monitoring the results to ensure that the problem is solved or the question is answered.

6. The sixth step is to evaluate the solution or answer. This involves assessing the effectiveness of the solution or answer and identifying any areas for improvement.

7. The seventh step is to communicate the solution or answer. This involves sharing the results of the analysis and the solution or answer with the relevant stakeholders.

8. The eighth step is to document the solution or answer. This involves creating a record of the solution or answer and the steps taken to develop it.

9. The ninth step is to review the solution or answer. This involves periodically reviewing the solution or answer to ensure that it remains effective and relevant.

10. The tenth step is to update the solution or answer. This involves making any necessary changes to the solution or answer based on new information or feedback.

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Powder Coating

1-Mask holes as per dwg D3443 ☐ START TIME: 1:45 ☐ OVEN TEMPERATURE: _____ ☐ FINISH TIME: 4:05

4x Ø m 11/08/31

[illegible]

Quality Control

4 of 11 10/23/

[illegible]

Packaging

stock Location: 5f
w/o
71990 (2)

25/09/07 (14)

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Work Order ID 70525

Friday, June 10, 2011 11:42:13 AM



Page 3

Item ID: D3443-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Strut Weldment Assembly

Start Date: 6/10/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 6/15/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/9/11 [Signature]

MF 11-09-09

W/O:		WORK ORDER CHANGES					
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Picklist Print

Friday, June 10, 2011 11:42:19 AM

Page 1

Work Order ID: 70525

Parent Item: D3443-043

Parent Item Name: Strut Weldment Assembly




Start Date: 6/10/2011

Required Date: 6/15/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV. A 05.11.17 NEW ISSUE EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3443-3  Clevis		Manufactured	No			100	Each	3.0000	1	2			
B71 895 X 4													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA022				3					
				69055				3					
D3443-7  Tubing		Manufactured	No			100	Each	3.0000	1	2			
B71 664 X 4													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA023				3					
				69056				3					
D3966-4-750  Pin, Dowel		Manufactured	No			100	Each	44.0000	1	2			
B71 664 X 4													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST100				44					
				58711				44					

B71 895 X 4

B71 664 X 4

B71 664 X 4

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

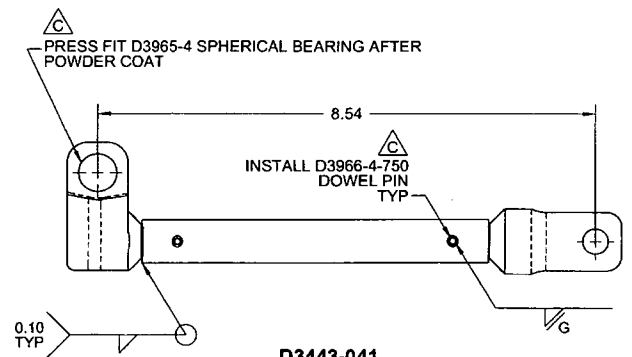
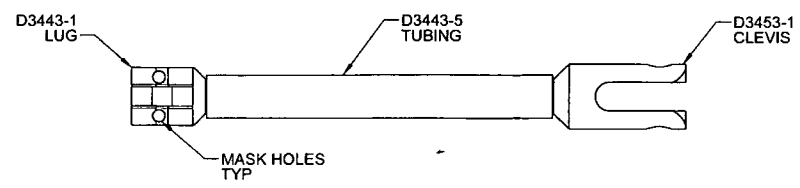
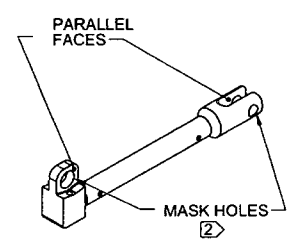
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D3443-041	STRUT WELDMENT ASSEMBLY
2	1	D3443-1	LUG
3	1	D3443-5	TUBING
4	1	D3453-1	CLEVIS
5	1	D3965-4	BEARING, SPHERICAL
6	2	D3966-4-750	PIN, DOWEL



D3443-041

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
NO POWDER COAT IN HOLES
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 1.33 lbs
 - 8) WELD PER DART QSI 004

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 70525

11-06-10

RELEASED
09/08/25 NP

C	DRAWING UPDATED TO CURRENT STANDARDS. REVISED NOTE #2 (ZN A8-1, A8-2); 0.820 WAS 0.720 & 1.43 WAS 1.53 (ZN C2-3); 0.561 WAS 0.451 (ZN C1-3); R0.219 WAS R0.050 (ZN C4-3); D3965-4 WAS SPAENAUER PIN (ZN C6-1, B5-2); D3966-4-750 WAS MCMASTER-CARR PIN (ZN B5-1); REF PAR 09-018	RF	09.06.25
B	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & Ø0.125 WAS #30	RF	05.12.05
A	NEW ISSUE	RF	05.09.02
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>[Signature]</i>	D3443	SHEET 1 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	STRUT WELDMENT ASSEMBLY	
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

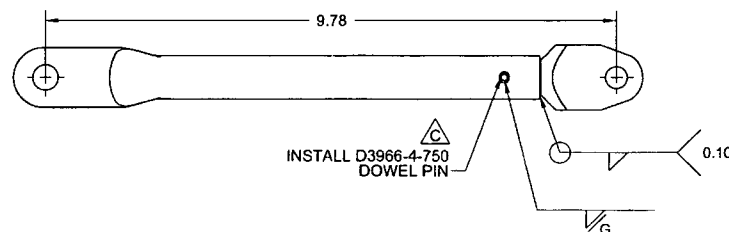
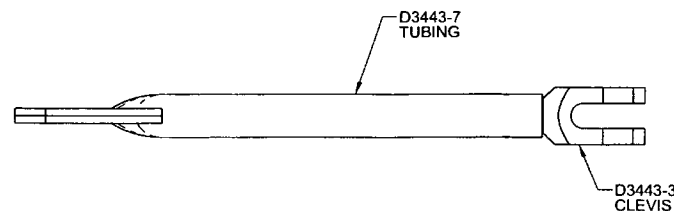
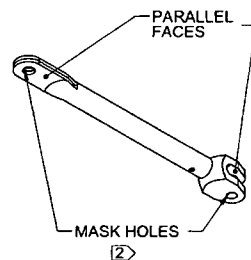
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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ITEM	QTY -043	P/N	DESCRIPTION
1	X	D3443-043	STRUT WELDMENT ASSEMBLY
2	1	D3443-3	CLEVIS
3	1	D3443-7	TUBING
4	1	D3966-4-750	PIN



D3443-043

W/070525

RELEASED
09/06/25/14

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
NO POWDER COAT IN HOLES
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.97 lbs
- 8) WELD PER DART QSI 004

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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CHECKED	RF	DRAWING NO. D3443	REV. C
MFG. APPR.		SHEET 2 OF 4	
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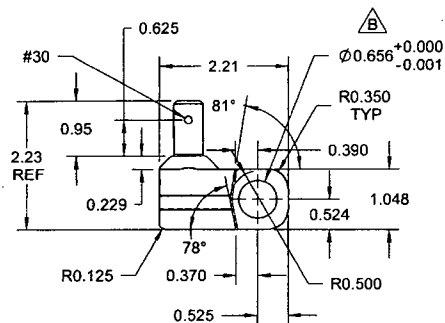
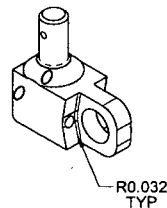
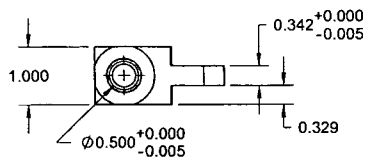
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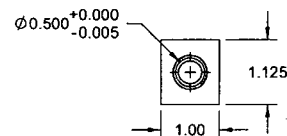
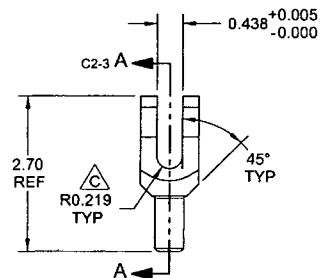
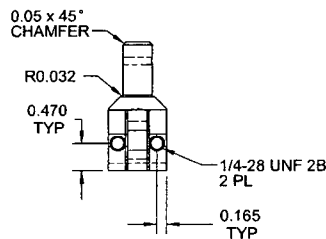
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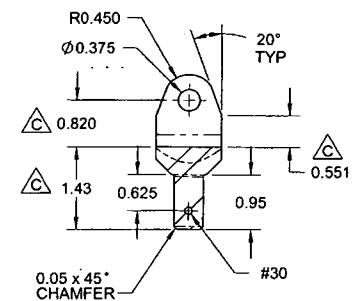
NOTE: Date & initial all entries



D3443-1 LUG



D3443-3 CLEVIS



SECTION A-A C4-3



NOTES:

- 1) MATERIAL: D3443-1 = 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)
D3443-3 = AISI 304 SS ROUND BAR (REF. DART SPEC M304R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3443-1 = 0.50 lbs
D3443-3 = 0.35 lbs

RELEASED
09/06/25/14

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. C
MFG. APPR.	RF	D3443	SHEET 3 OF 4
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	STRUT WELDMENT ASSEMBLYNTS	
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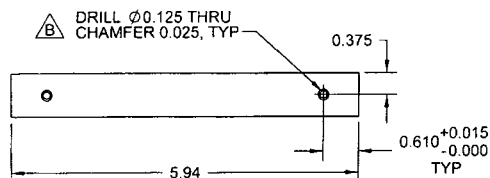
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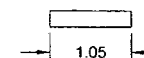
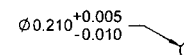
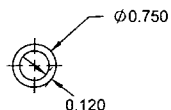
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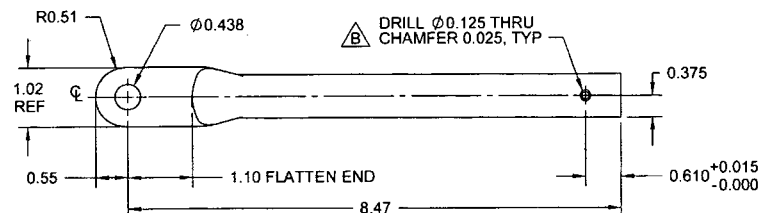
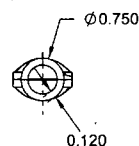
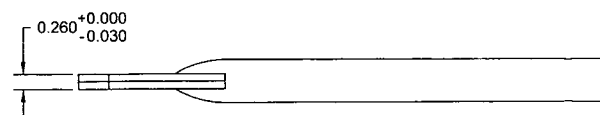
D3443-5 TUBING



D3443-9 PIN

D3443-9 NOTES:

- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A



D3443-7 TUBING

D3443-5/-7 NOTES:

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.750W.120)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.025 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3443-5 = 0.41 lbs
D3443-7 = 0.62 lbs

W/ 70525

RELEASED
07/08/25 MD

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>RF</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>[Signature]</i>	D3443	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	STRUT WELDMENT ASSEMBLY NTS	
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